INNOVATIVE FOCUS OF HUMAN RESOURCES FOR ORGANISATIONAL EXCELLENCE: IN SELECTED AUTOMOBILE COMPANIES

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Abstract

The current business environment requires changes and innovation in any organisation. Today, the success of any organisation depends on the skills and attitude of their employees for changes. The environmental changes can be implemented in any company with the assistance of different departments' employees. Commitment and attitude of employees are main factors for the success and adjustment with environmental changes. The paper discusses the importance and involvement of employees in automobile companies. The paper presents that innovative focus of members can help in the survival of a company. In this paper, new ways of working and recognition of wastage are considered as innovative focus and steps of employees which are essential for the success of any firm in competitive environment.

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Introduction

Environmental changes like short product life cycle, demand changes and keen competition raise the importance of cost management methods and the cost management methods must be used for new products production which can meet customers' expectations as well as reduction of cost of existing products through the elimination of wastes. Therefore, a manufacturing company has to focus on design and development activities as well as production activities during the whole product life cycle. It creates the need of total cost management for a company. Total cost management refers cost management in all phases of product life cycle. This concept involves all members from different departments of the firm. Target and kaizen costing are taking attention mainly in the manufacturing companies. The coordination of target costing and kaizen costing is done to ensure a proper implementation of the total cost management to attain goals of the company (Monden & Lee, 1993). These concepts are totally different from the traditional state of mind. Target costing is a strategic management accounting practice which involves shaping the price by first the market is willing to pay and then produces a product or service to meet that price and kaizen costing involves the continuous improvements of products (McLaney & Atrill, 2002). The cross-functional team structure is the critic component for the implementation of target and kaizen costing. Target and kaizen costing successful implementation depend on the employees of different departments of the company. Previous studies said that motivational consideration is very important for well execution of these techniques in company. Target cost and kaizen cost targets can be met by the company through the assignment and decomposition of total target costs and kaizen costs among different departments. The amount of kaizen cost targets must not be affected by the organizational power instead of this self control autonomous involvement should be prevailed. For target and kaizen costing proper application, each employee must adjust and work for cost reduction optimistically.

Target costing process requires the involvement of different departments' employees of the organization. Different departments perform in different ways in target costing process for the attainment of target costs. Tani (1995) argued that environmental uncertainty influences target costing**.** Environmental uncertainty is governed by the occurrence of technological innovation, market competition intensity and the diversification of customer requirements. The target costing process looks easy and straightforward to implement but its implementation requires a different mindset (Feil et al., 2004). Kato (1993) argued that target costing has positive impact on new

product design and development and it should be used with caution, also for creative products design engineers should be worked under relaxed conditions not under time pressure. The cross-functional teams are responsible from the initial concept of product to the end or final product (Ansari & Bell, 1997). Target costing successful implementation fails when management and shop floor employees do not know and cannot understand the working philosophy of costing techniques and strategies of their organization (Ansari & Bell, 1997). Yasuhiro & John (1993) commented that kaizen costing works on the establishment of a cost reduction target amount through continuous improvement or kaizen activities in operations. Previous studies indicated that because the elimination of waste is the main objective of lean thinking the instrument for conducting constant search for waste at all levels by all workers and throughout the work area is kaizen (Imai, 1986; Wittenberg, 1994). Kaizen concept focuses on Muda (productive loss) for eliminating waste and these wastes can be waiting time for material or delays in delivery, defects, inappropriate processes, excessive materials, idle time of workers, over and under production etc. It also needs small-groups activities as informal, voluntary, intercompany groups based on kaizen-minded and self-disciplined employees (Karkoszka & Honorowicz, 2009). According to Yasuhiro & John (1993) kaizen costing activities maintain the current level of the existing production costs and further reduce costs to an expected level based on the plans of firm. Basically there are two types of activities in production process namely value added and non value added activities (Modarress et al., 2005). Value added activities transform materials into a product and non value added activities such as rework, inspection, queues, waiting time and moving material in the production process adds no benefit to the product. The ideal situation would be one where value-added and non value added activities are easily recognized by workers and new ways are found to eliminate wastes or non value added activities. Now, mostly in manufacturing companies employees focus on wastes, defects, problems and new procedures to complete their tasks.

Review of Literature

Target costing is adopted as a philosophy that has gained recognition due to the need to produce a product at a pre decided cost level. This method is used with the help of team not to control employees and teams. In target costing process top management and all remaining employees are important (Ansari & Bell, 1997). Typically there are four main teams in a manufacturing process

of product: the business planning team, the product team, the design team and the product manufacturing team (Ansari & Bell, 1997). The effectiveness of this method usually increases with the involvement of personnel. The members of team should be trained to apply the target costing process. This system motivates employees think and act strategically. Multidisciplinary teams are crucial (Cooper & Slagmulder, 1997). These teams play very important role in achieving cost/price, quality and functionality objectives. Without these teams shop floor workers commit no cost reduction. Target costing process focuses on designing the new products and cross functional teams to assess the possible design alternatives. Commitment of workers towards task requires trust and respect among team members. Support of all employees is vital for target costing. Kato et al. (1995) supported cross functional teams and they use the term "people involvement". An integrated and skilled product development team having members from different departments and they can satisfy the requirements of market (Butscher & Laker, 2000).

Kato et al. (1995) presented some common importance of cross functional teams for target costing. Cross functional team members are from different departments and all worked together for smooth functioning of target costing. Active support of upper level management, empowered cross functional teams and internal reward structure are important elements for the success of target costing. Cross functional cooperation is also important for strategy formulation process. According to Ansari & Bell (1997) implementation of target costing requires responsive spirit of employees for efficient operations and improvement in the firm. Team members often negotiate to set the level of target costs but there negotiation is not seen as bargaining. There negotiation is the rationality of the team members and it motivates employees in positive way with their commitment to achieve assigned targets. Cross functional team is answerable for the entire life cost management of product. The target costing method decides cost objectives and goals for teams and it is the base of their performance measurement. Target costing can achieve its goal with the participation of all departments and the departments help in different ways.

Kaplan & Cooper (1998) mentioned that kaizen philosophy favours to delegate more authority and responsibility to the specific teams in order to provide them freedom in improving their parts in the process. In this system every activity is supported by a work team that shares the result. Kaizen costing is carried out by the team members and it is mainly related to operational measures. Kato (1993) outlined that in companies there should have skills to decompose

functions of product into sub functions, a market research system with different forecasting techniques, proper facilities to change the functions into value of product, a value-price adjustment system and a user friendly crossing point.

Cheser & Tanner (1993) indicated the use of kaizen costing within a given framework and with the involvement of groups. They stated that after the estimation of investment working groups which are working with that issue are informed about these estimates to make them understand about the earlier stage of the challenges and this also provides a clarification about the problem issues and cost rationalization to the working groups. They said usually the operators develop the ideas then designers apply the changes and the consumers give the purchase price. They stated that in kaizen costing every activity is managed by a work team and these teams share the outcome by establishing new ideas. They said that knowledge is developed by groups about the different ways to reduce costs.

Feil et al. (2004) described that top management leadership; team-orientation, commitment to work, mutual trust and information network are the pillar of target costing implementation. Utari (2011) discussed two sub cycles of kaizen costing method PDCA (Plan, Do, Check, Act) and SDCA (Standardize, Do, Check, Act) to solve the problems and said through the implementation of kaizen costing the number of rejected products can be decreased to zero and company can produce a quality product based on the customer desires. Webb (1991) defined that kaizen is related with the reduction of waste and for the application and success of this approach an organization and also management should become aware about wastes. Womack & Jones (1996) defined waste as any human activity that consumes resources but adds no value to the product or process. They stated that employees are able to identify several different types of wastes/muda in their workplace. Ghalayini et al. (1997) added that kaizen is characterized and mainly used by operators on the shop floor level to identify problems and suggestions to solve problems which essence bottom-up change. Malloch (1997) argued that for waste elimination the reduction of unnecessary human movements and well managed environment are essential.

Objective of the study

The objective of the study is to evaluate the involvement of members in identification of work problems, wastes, defects and creativity in work with the implementation of two modern costing techniques namely target and kaizen costing in the sample companies.

H_0- There is no involvement of members in identification of work problems, wastes, defects and creativity in work.

Methodology

In the present study data collected from sample companies from automobile industry is analysed to accomplish the objective of the study.

Research Population

The research objective of the study is concern with the use of kaizen and target costing techniques in Indian automobile companies. The target population of this study identified in this concern is Indian automobile companies. This study concentrates only on this sector in order to avoid confusion arising from variations between different sectors. Automobile sector is suitable for this study because according to literature this sector have a higher proportion of firms who are most likely to use kaizen and target costing techniques.

Sample Selection

The study has been conducted on automobile manufacturers in India. The modern costing techniques were originated in Japanese automobile companies which provide an ideal base for the present study on target and kaizen costing in Indian automobile companies. Cost management is a vital area in automobile manufacturing companies and these companies focus on the implementation of new costing techniques. One reason for choosing sample automobile companies is that they are the large-sized firms, having good image in their field and have larger resources available for investment in new techniques such as kaizen and target costing. The three rational criteria for sample selection were: Research objective, existing literature and data availability and accessibility. The sample of study should be representative of the population. In this view, purposive as well as convenience sampling have been applied to select the sample of the study, because it is believed that selected sample companies providing the typical information for the accomplishment of the study. Therefore, three large companies were selected which were considered relevant to the purpose of the study.

Sample of the Study

A sample of three automobile companies was taken for the study. For the study following companies have been taken as sample companies-

1. Maruti Suzuki India Limited
2. Hero Motocorp Limited
3. Honda Motorcycle and Scooter India Private Limited

Sample Size

The sample size from each of the sample company in this study after response of respondents has been used as under:

	Maruti	Hero Motocrp	Honda
Non Managers	87	75	48

In the above stated way total sample size of 210 has been used (and data is collected) for the attainment of the objective of the study.

Data collection

For the completion of the study both primary as well as secondary data have been used. Data from primary sources have been attained for this study through various means such as direct visits in companies, structured questionnaires which were distributed among respondents, also e-mail of questionnaires, discussions with the officials of sample companies, feedback from managers at different level, people at operational level, through telephone calls, face to face conversations and interaction with employees of companies. Data from secondary sources have been obtained from financial statements of companies, annual reports of companies, research and development statistics of the sample companies, other documents underlying cost management, websites of companies (Maruti Suzuki, Hero Motocorp and Honda Motorcycle & Scooter), textbooks, web pages (internet search), trade and scholarly Journals (literature or previous studies) related to cost management and control in manufacturing companies.

Research Instrument

In this research, the most applicable method of primary data collection is deemed to be questionnaire. The questionnaire had been developed containing various questions in this study

for employees. The questionnaire has mainly questions regarding waste and defects identification, use of new ways of work and contribution of members in continuous improvement programs. The remaining questions are also concerned with the main part of the study under investigation. Different questions of questionnaire address different aspects of the study.

Statistical techniques

Analysed data is presented in form of frequency tables and in percentages. The descriptive analysis of the data is used to provide a summary of responses of the respondents, which are: frequency distributions and percentage. Descriptive statistics have been used to draw percentages of frequencies. Chi-square test has been used mainly for data analyses. It is used to find out any significant difference between observed and expected responses.

Data Analyses

The analyses regarding the objective have been done on the basis of questions in the questionnaire related with the objective and it is depicted as under:

Table 1: Contributing Towards Continuous Improvement Programs

Crosstab

			Name of Company			Total
			MARUTI	HERO	HMSI	
Contributing towards continuous improvement program	Disagree	Count	2	0	0	2
		Expected Count	.8	.7	.5	2.0
	Neutral	Count	9	2	7	18
		Expected Count	7.5	6.4	4.1	18.0
	Agree	Count	58	57	18	133
		Expected Count	55.1	47.5	30.4	133.0
	Strongly Agree	Count	18	16	23	57
		Expected Count	23.6	20.4	13.0	57.0
Total		Count	87	75	48	210
		Expected Count	87.0	75.0	48.0	210.0

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	25.231(a)	6	.000
Likelihood Ratio	26.211	6	.000
Linear-by-Linear Association	6.492	1	.011
N of Valid Cases	210		

a 4 cells (33.3%) have expected count less than 5. The minimum expected count is .46.

In order to analysis the contribution towards continuous improvement programs or teams, an empirical study has been carried out in this context. The above table 1 shows that expected and count figures indicate a considerable difference in contribution towards continuous improvement programs or teams. It is observed that the calculated value of chi square at 6 df. @ 5% level of significant, indicate 25.231. Meaning thereby, that calculated value of chi square is higher than that of given value that is 12.53. Hence, the null hypothesis is rejected. Hence, it is quite obvious that in the all three companies employees contribute in continuous improvement programs and teams. It is clear from the observation, that employees have marked (190) in total on 'strongly agree and agree'. It indicates a clear-cut picture about the contribution of employees of sample companies in continuous improvement programs.

Table 2: Focus on Defects Identification

Crosstab

			Name of Company			Total
			MARUTI	HERO	HMSI	
Focus on defects identification	Disagree	Count	0	0	2	2
		Expected Count	.8	.7	.5	2.0
	Neutral	Count	0	6	3	9
		Expected Count	3.7	3.2	2.1	9.0
	Agree	Count	35	60	15	110
		Expected Count	45.6	39.3	25.1	110.0
	Strongly Agree	Count	52	9	28	89
		Expected Count	36.9	31.8	20.3	89.0
Total		Count	87	75	48	210
		Expected Count	87.0	75.0	48.0	210.0

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	56.215(a)	6	.000
Likelihood Ratio	63.438	6	.000
Linear-by-Linear Association	5.942	1	.015
N of Valid Cases	210		

a 6 cells (50.0%) have expected count less than 5. The minimum expected count is .46.

The above table 2 explains regarding the focus on defects identification by the employees in all companies, an empirical study has been carried out in this context. The expected and count figures indicate a considerable difference in focus on defects identification. In this context, it is observed that the calculated value of chi square at 6 df. @ 5% level of significant, indicate 56.215. Meaning thereby, that calculated value of chi square is higher than that of given value that is 12.53. Hence, the null hypothesis is rejected. It is quite obvious that in all sample companies employees focus on defects identification. It is clear from the observation, that employees have marked (199) in total on 'strongly agree and agree'. It indicates a clear-cut picture regarding the focus of employees on defects identification in all companies.

Table 3: Focus on Waste Reduction

Crosstab

			Name of Company			Total
			MARUTI	HERO	HMSI	
Focus on waste reduction	Disagree	Count	0	0	1	1
		Expected Count	.4	.4	.2	1.0
	Neutral	Count	3	6	1	10
		Expected Count	4.1	3.6	2.3	10.0
	Agree	Count	50	61	21	132
		Expected Count	54.7	47.1	30.2	132.0
	Strongly Agree	Count	34	8	25	67
		Expected Count	27.8	23.9	15.3	67.0
Total		Count	87	75	48	210
		Expected Count	87.0	75.0	48.0	210.0

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	31.461(a)	6	.000
Likelihood Ratio	33.617	6	.000
Linear-by-Linear Association	.036	1	.849
N of Valid Cases	210		

a 6 cells (50.0%) have expected count less than 5. The minimum expected count is .23.

In order to analysis the and easily understand the variable focus on waste reduction; an empirical study has been carried out in this context. The above table 3 shows that expected and count figures indicate a considerable difference in focus on waste reduction. It is observed that the calculated value of chi square at 6 df. @ 5% level of significant, indicate 31.461. Meaning thereby, that calculated value of chi square is higher than that of given value that is 12.53. Hence, the null hypothesis is rejected. Hence, it is quite obvious that in all sample companies employees focus on waste reduction. It is clear from the observation, that employees have marked (199) in total on 'strongly agree and agree'. It indicates a clear-cut picture about the focus of employees on waste reduction with their routine work in all sample companies.

Table 4: Focus on New Ways

Crosstab

			Name of Company			Total
			MARUTI	HERO	HMSI	
Focus on new ways	Neutral	Count	1	7	1	9
		Expected Count	3.7	3.2	2.1	9.0
	Agree	Count	51	51	29	131
		Expected Count	54.3	46.8	29.9	131.0
	Strongly Agree	Count	35	17	18	70
		Expected Count	29.0	25.0	16.0	70.0
Total		Count	87	75	48	210
		Expected Count	87.0	75.0	48.0	210.0

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	11.657(a)	4	.020
Likelihood Ratio	11.713	4	.020
Linear-by-Linear Association	.859	1	.354
N of Valid Cases	210		

a 3 cells (33.3%) have expected count less than 5. The minimum expected count is 2.06.

The above table 4 has revealed about the focus on identify new ways of work by the employees in the all sample companies; an empirical study has been carried out in this context. The expected and count figures indicate a considerable difference in focus on identify new ways of work. In this context, it is observed that the calculated value of chi square at 4 df. @ 5% level of significant, indicate 11.657. Meaning thereby, that calculated value of chi square is higher than that of given value that is 9.49. Hence, the null hypothesis is rejected. It is quite obvious that in all sample companies employees focus on identify new ways for work improvement. It is clear from the observation, that employees have marked (201) in total on 'strongly agree and agree'. It indicates a clear-cut picture about the focus of employees on identification of new ways for work improvement in all sample companies.

Table 5: Prefer to Work in Teams

Crosstab

			Name of Company			Total
			MARUTI	HERO	HMSI	
Prefer team work	Neutral	Count	3	4	0	7
		Expected Count	2.9	2.5	1.6	7.0
	Agree	Count	38	50	24	112
		Expected Count	46.4	40.0	25.6	112.0
	Strongly Agree	Count	46	21	24	91
		Expected Count	37.7	32.5	20.8	91.0
Total		Count	87	75	48	210
		Expected Count	87.0	75.0	48.0	210.0

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	13.013(a)	4	.011
Likelihood Ratio	14.835	4	.005
Linear-by-Linear Association	.294	1	.588
N of Valid Cases	210		

a 3 cells (33.3%) have expected count less than 5. The minimum expected count is 1.60.

In order to analysis that the employees prefer team work in sample companies, an empirical study has been carried out in this context. The above table 5 shows that expected and count figures indicate a considerable difference in prefer team work. The researcher observes that the calculated value of chi square at 4 df. @ 5% level of significant, indicate 13.013. Meaning thereby, that calculated value of chi square is higher than that of given value that is 9.49. Hence, the null hypothesis is rejected. Hence, it is quite obvious that in all sample companies employees prefer team work than individual work. It is clear from the observation, that employees have marked (203) in total on 'strongly agree and agree'. It indicates a clear-cut view regarding the preference of employees about team work in all three companies.

Conclusion

The business environment and desires of customers for innovative and new products create the need of change in any company. Today, if a company cannot adjust with environment changes it cannot survive for a long period. Now, for any company understanding of environmental changes and adjustment for the changes are the keys of success. After the analyses of all statements and questions in respect of the objective which is concerned with the involvement of members in identification of work problems, waste, defects and creativity it is clear that employees of sample companies have innovative focus for changes. The study found that in sample companies' employees regularly give contribution in continuous improvement programs; they focus on defects identification, waste reduction and new ways of working. The study also found that members prefer to work in teams than individual work. The study suggests that to

remain competitive in current business environment a company should be attentive for the involvement and working spirit of their employees. No company can be successful without their human resources and employees are human capital for an organisation, if a company provides their employees a good working environment than this capital will increase the profits of the organisation. The study concludes that, if employees are satisfied with their top authority and their company, they work with full commitment, identify new work problems and they will accept the environmental changes and adjust in new working conditions according to the changes.

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